

## WHAT IS CLAIMED IS:

1. A servo-write method comprising the steps of:

writing a recording region detecting signal on a magnetic disk that a magnetic disk device has just when a magnetic head that said magnetic disk device itself has is loaded on said magnetic disk at a stage where any positioning signal for said magnetic head is not recorded on said magnetic disk; and

determining a servo signal writing region of said magnetic disk on the basis of the position at which said recording region detecting signal has been written on said magnetic disk.

- 2. A magnetic disk device comprising:
  - a magnetic disk for storing information;
- a spindle motor for driving said magnetic disk to rotate;
- a magnetic record head for recording information on said magnetic disk;
- a magnetic reproduce head for reproducing information from said magnetic disk;
- an actuator having a suspension for supporting said magnetic heads to be movable on said magnetic disk and drive means for driving said suspension;
- a ramp road for letting said magnetic heads retreated from said magnetic disk be rested thereon; and
  - a stopper for limiting the movable range of

said actuator, wherein a recording region detecting signal is written on said magnetic disk just when said magnetic heads are loaded on said magnetic disk that has no positioning signal recorded for positioning said magnetic heads, and a track region on said magnetic disk is determined on the basis of the position at which said recording region detecting signal has been written.

- 3. A magnetic disk device according to claim 2, wherein said track region is selected to be an interval between said position at which said recording region detecting signal has been written, and a position at which said magnetic heads are stopped by said stopper.
- 4. A magnetic disk device according to claim 2, wherein said recording region detecting signal is written in a loading area between said ramp road and said servo signal.
- 5. A magnetic disk device according to claim 2, wherein a write current is caused to flow to said magnetic record head in only a time interval in which said magnetic head is loaded from a constant position on said ramp road onto said magnetic disk, thereby writing said recording region detecting signal at a predetermined position on said magnetic disk.
- 6. A magnetic disk device according to claim 2, further comprising means for calculating a time interval in which said magnetic heads are loaded from a constant position on said ramp road onto said magnetic

disk on the basis of the distance that said magnetic heads have moved and the speed at which said magnetic heads have moved.

- A magnetic disk device according to claim 2, wherein a propagation-purpose pattern is sequentially recorded on said magnetic disk from a stop position at which said magnetic heads are stopped by said stopper in the radius direction, and when said recording region detecting signal is detected, the detected position is determined to be one end of said track region.
- 8. A magnetic disk device according to claim 2, wherein a head feeding pitch at which a product-purpose servo signal is recorded is calculated from the number of times that said magnetic head is fed for recording a propagation-purpose pattern to move from a stop position at which said magnetic head is stopped by said stopper to a position at which said recording region detecting signal is detected, and a designed number of tracks.
- 9. A magnetic disk device according to claim 8, further having a pattern according to said head feeding pitch at which said head is fed to record said product-purpose servo signal, and said propagation-purpose pattern formed at a head feeding pitch according to the size of said magnetic record head.